High Impact Issues (GAS)

We are working to reduce the risks to pipeline integrity which threaten public safety and the environment. We have revised our inspection process to help us address areas we have determined to impact pipeline integrity. A review of nationwide accident reports and comprehensive investigations identified several critical pipeline safety issues. These issues appear to either cause or significantly contribute to pipeline accidents. As part of our inspection process, we are determining how pipeline companies are addressing these issues and are taking note of the best industry practices we observe.

We are looking at the pipeline company as a whole rather than individual segments of pipe or pipeline facility and are discovering that a system-wide approach is far more effective and, in most cases, more efficient means of evaluating pipeline integrity. Some of the issues we will discuss with you may be better addressed by your headquarter or corporate office. Other issues can be answered at field locations. Please advise us if you prefer to defer the question to another company representative.

This is an opportunity for us to learn how your company works to prevent pipeline accidents. Please advise us if we discuss or obtain copies of any proprietary information. It is important that we identify this information because of Freedom of Information Action requirements.

Finally, our review will include an inspection for compliance with certain pipeline safety regulations. To evaluate these issues, we will need to review your procedures, records and pipeline facilities. Please let us know if the records or procedures we request are kept at another location.

Thank you for your cooperation.

NA: Not Applicable NC: Not Checked

"Satisfactory" should be marked if no probable violation is identified. If an issue is identified which meets the minimum safety regulations and yet can be improved, please mark "Satisfactory" and discuss, in the comment section, where positive changes can be made.

Best Practice: This is our opportunity to share "best practices" with the inspected company. Comments may reflect industry standards or best practices and are not a negative reflection on the operator. All items which reference a "Best Practice" should only contain "Comments" because there are no regulations for this issue. Comments regarding an operator's program to incorporate these practices should be noted in the comment section.

"Needs Improvement" should be marked only if a probable violation is identified. Because "Needs Improvement" may include a serious compliance problem or a minor non-compliance, it is important the probable violation is thoroughly described in the comment section.

Person(s) Interviewed - Person interviewed should be documented on the front of the inspection form

Guidance - The "guidance" material was developed to assist the inspector with the engineering analysis/evaluation of pipeline operation, maintenance, and emergency functions.

Name of Operator:				
HQ Address:		System/Unit Name Address:		
Co Official (Prog on VP)		Tolonhono numbon		
Co. Official (Pres or VP) Telephone number:		Telephone number:	:	
Fax number:		rax number:		
Emergency Telephone:		Emergency Teleph	one	
Operator ID:	Unit ID:	Emergency relepho	Activity ID:	
Unit IDs of adjacent Operator units:	Cint 1D:		Activity ID.	
<u> </u>	Tri	doe	Phone Numbers	
Persons Interviewed Tit		nes	Phone Numbers	
OPS Representative(s):	<u> </u>		<u> </u>	
Company system maps - (copies for reg	gional files, yes / no):			
System/Unit Description:	<u> </u>			
Portion of Unit Inspected:				
Was a Team O&M inspection complete	ed previously?	If yes, docume	ent date? / /	
Note: If a Team O&M inspection was con		(5) years, it is not nece	essary to review the entire O&M manual.	

MAOP/Overpressure Protection

Overpressure protection is essential to protect the pipeline from unexpected events. The operator should have procedures in place to ensure that the overpressure protective devices are adequate and in good working condition. Discuss with personnel how they would ensure a change in operating pressure, possibly due to a safety related condition, is communicated throughout the company.

192.169 - Compressor Station Pressure Limiting - Suitable protective devices of sufficient capacity for station piping.

G-Q1) Have relief valves, associated piping and exhaust ports been designed and tested for pressure setting and capacity periodically reviewed?

R1) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q1) Headquarters				
Q1) Field				
R1) Headquarters				
R1) Field				

1) Comments:		

192.169(b) Each vent line that exhausts gas from the pressure relief valves of a compressor station must extend to a location where the gas may be discharged without hazard.

G-Q2) Have relief valve exhaust ports been routed and positioned away from potential ignition sources and electrical power lines or where gas build up may cause a hazardous atmosphere?

	Satisfactory	Needs Improvement	N/A	N/C
Q2) Headquarters				
Q2) Field				
R2) Headquarters				
R2) Field				

2) Comments:			

102 721(b) Any defect		es - Inspection and testing o	of pressure control	ling devices.
192.731(b) Any defect	tive or inadequate e	quipment found must be pr	omptly repaired o	r replaced.
G-Q3) Have station pa once per calendar yea		devices been inspected and t	tested within the re	equired 15 month and
R3) Associated Recor	ds?			
	Satisfactory	Needs Improvement	N/A	N/C
Q3) Headquarters				
Q3) Field				
R3) Headquarters				
R3) Field				
a) a :				
3) Comments:				
192.203 - Instrument,	control and sampli	ing lines - Materials and des	sign of takeoff lines	
		8	- 	S.
C-OA) Have all contr	al lines been design			
		ned such that damage to one nted over-pressure protectiv	e line will not inhib	
		ned such that damage to one	e line will not inhib	
both a regulator and a		ned such that damage to one	e line will not inhib	
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Q4) Headquarters Q4) Field R4) Headquarters R4) Field	a monitor or associa	ned such that damage to one ated over-pressure protectiv	e line will not inhib re device?	oit the operation of

192.605(c)(1) - Procedures for Responding to Abnormal Operation -Responding to, investigating and correcting the cause of unintended closure of valves or shutdowns and an increase or decrease in pressure or flow rate outside normal operating limits.

G-Q5) Did the operator respond in accordance with procedures to recent events that occurred where a line segment experienced an unscheduled shutdown, or where normal flow was restricted? List recent events in the comment section below. Were procedures refined because of shortcomings?

	Satisfactory	Needs Improvement	N/A	N/C
Q5) Headquarters				
Q5) Field				
R5) Headquarters				
R5) Field				

5) Comments:		

192.619(a) - MAOP and Pressure Records - Determining MAOP from design, test, history and integrity.

G-Q6) Does the Operator have records to support the MAOP applied to each line segment? (Note: If the operator previously verified the MAOP, just note the date of the verification.)

R6) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q6) Headquarters				
Q6) Field				
R6) Headquarters				
R6) Field				

6) Comments:			

Best Practice G-Q7) Does the Opera	ator have operatin	g pressure records to refle	ect actual system pre	ssures?
7) Comments:				
192.619(a) cont'd G-Q8) Has the MAOI safety related condition R8) Associated Record	on or class location	ent changed in the last yea n change?	r or two? (The char	nge may be due to a
	Satisfactory	Needs Improvement	N/A	N/C
Q8) Headquarters				
Q8) Field				
R8) Headquarters				
R8) Field				
8) Comments:				

192.619(b) - Over-Pressure Protective Devices - Relief valves or other protective devices set to appropriate pressures.

G-Q9) Have recent occurrences of over-pressure been investigated for the possibility of an equipment failure or design flaw? How did the operator verify that such conditions did not exist at other locations?

R9) Associated Records?

Q10) Headquarters Q10) Field R10) Headquarters	
R9) Headquarters R9) Field 9) Comments: 92.739 Pressure Limiting and Regulating Stations - Inspection and testing of pressure influencing G-Q10) Have regulators been inspected and tested to be in good mechanical condition and checked dequate capacity within the required 15 months and once per calendar year? Were changes to the soints of regulators documented? 10) Associated Records? Satisfactory Needs Improvement N/A Proposition of the solution of the sol	
9) Comments: 92.739 Pressure Limiting and Regulating Stations - Inspection and testing of pressure influencing G-Q10) Have regulators been inspected and tested to be in good mechanical condition and checked dequate capacity within the required 15 months and once per calendar year? Were changes to to ints of regulators documented? 10) Associated Records? Satisfactory Needs Improvement N/A P. Q10) Headquarters Q10) Field R10) Headquarters	
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Satisfactory Needs Improvement N/A N Q10) Headquarters Q10) Field R10) Headquarters	
Q10) Headquarters Q10) Field R10) Headquarters	
Q10) Field R10) Headquarters	I/C
R10) Headquarters	
D10) E' 11	
R10) Field	
10) Comments:	

192.743 Pressure limiting and regulating stations: Testing of relief devices.

G-Q11) Have relief devices been checked for designed capacity within the required 15 months and once per calendar year? Were engineering calculations checked if an actual test was not feasible? If the device was not of sufficient capacity, were other devices added or changed?

R11) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q11) Headquarters				
Q11) Field				
R11) Headquarters				
R11) Field				

11) Comments:			

Inspection Criteria relating to SCADA and other Alarm Systems

192.736(b) - Gas Detection in Compressor Buildings - Warn personnel in or about to enter buildings.

G-Q12) Have gas detection alarm systems been installed in enclosed compressor buildings, such that persons in, or about to enter, the buildings will be alerted to the presence of an unusually high level of gas? Is the equipment calibrated to 25% LEL?

R12) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q12) Headquarters				
Q12) Field				
R12) Headquarters				
R12) Field				

(2) Comments:		
,		
est Practice:		

G-Q13) Does the controller have the authority to shutdown the pipeline system as a result of an abnormal condition?

13) Comments:

Best Practice: G-Q14) Does the operat	tor address controll	er fatigue issues?		
14) Comments:				
192,605(c) Abnormal or	nerations. The oner	ator's procedures must a	ddress the require	nent for providing
safety when operating d			auress the requirer	nent for providing
192.605(C)(1)(iii) Respo	onding to investigati	ing, and correcting the ca	use of loss of comm	nunications.
G-Q15) Will system ope	eration be affected l	by communication outage	s or SCADA failur	e?
	Satisfactory	Needs Improvement	N/A	N/C
Q15) Headquarters				
Q15) Field				
R15) Headquarters				
R15) Field				
15) Comments:				

Odorization

192.625 Odorization of gas.

G-Q16) Are odorant levels tested on a periodic basis?

R16) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q16) Headquarters				
Q16) Field				
R16) Headquarters				
R16) Field				

16) Comments:	

Engineering Drawing Review

192.605(b) Maintenance and normal operations. The operator's procedures must address the requirements for providing safety during maintenance and operations.

192.605(b)(3) Making construction records maps, and operating history available to appropriate operating personnel.

G-Q17) How does the operator control engineering drawing revision, review, approval, and distribution?

R17) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q17) Headquarters				
Q17) Field				
R17) Headquarters				
R17) Field				

17) Comments:		

192.605(b)(3) cont'd

Q18) Do the operator's "as-builts" agree with field? Do the SCADA terminals get updates?

R18) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q18) Headquarters				
Q18) Field				
R18) Headquarters				
R18) Field				

18) Comments:			

		/= \			
192	.605	(h)	(3)	COL	nt'd

Q19) How are completed construction activities, such as facility modifications, communicated to the controller?

R19) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q19) Headquarters				
Q19) Field				
R19) Headquarters				
R19) Field				

19) Comments:		

Process Control and Flow Schematic Drawing Review

Differences between process control engineering drawings and pipeline facilities have resulted in incidents and abnormal operating conditions. We have found that physical changes made to facilities are sometimes not reflected in engineering drawing or SCADA displays. The company should have a procedure in place that ensures changes in the field are communicated to appropriate personnel and correspondence maps, records and drawings corrected.

192.605(b)(3) cont'd

G-Q20) Do engineering, process control, and flow schematic drawings accurately depict current facilities and operation?

R20) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q20) Headquarters				
Q20) Field				
R20) Headquarters				
R20) Field				

20) Comments:		

Review of First Discovery Reports

First discovery reports are reports that may identify potential problems on, or in the vicinity of the pipeline, that could affect pipeline integrity and/or public safety. These reports could include any pipeline safety inspection and/or survey reports, landowner or general public reported concerns, patrol reports. Listed below are a few high impact examples.

192.459 External corrosion control: Examination of buried pipeline when exposed.

192.481 Atmospheric corrosion control: Monitoring.

192.613 Continuing surveillance.

192.703 (a) No person may operate a segment of pipeline, unless it is maintained in accordance with this subpart. (b) Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service. (c) Hazardous leaks must be repaired promptly.

G-Q21) Does the operator disseminate, monitor, and follow-up the information obtained from first discovery reports?

R21) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q21) Headquarters				
Q21) Field				
R21) Headquarters				
R21) Field				

21) Comments:	

192.613 cont'd

192.703 cont'd

192.705 Transmission Lines: Patrolling

G-Q22) Does the company follow-up and document discovered exposed spanning pipe in water and do they take fluctuating water levels into consideration?

R22) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q22) Headquarters				
Q22) Field				
R22) Headquarters				
R22) Field				
22) Comments: 192.613 cont'd				
192.703 cont'd 192.614 Damage Prever G-Q23) How does the o integrity issues? R23) Associated Record	perator follow-up a	nd document public/lando	owner complaints c	oncerning safety and
	Satisfactory	Needs Improvement	N/A	N/C
Q23) Headquarters		P=3.3333		
Q23) Field				
R23) Headquarters				
R23) Field				
23) Comments:				

192.	613	cont'	d

G-Q24) How does the operator follow-up and document integrity issues system-wide?

R24) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q24) Headquarters				
Q24) Field				
R24) Headquarters				
R24) Field				

24) Comments:		

Leak Detection, Classification and Response

Responding to notifications of leaks is critical to ensuring safety. The operator should have a plan and procedures instructing employees how to detect and respond to suspected leaks. Review the leak detection procedures, response time, and inquire about any impact due to manpower reduction or realignment and what procedures are in place to grade leaks consistently.

192.613 cont'd

192.615(a)(3)(i) Each operator shall establish written procedures to minimize the hazard resulting from a gas pipeline emergency. At a minimum, the procedures must provide prompt and effective response to a notice of each type of emergency, including explosion occurring near or directly involving a pipeline facility.

G-Q25) Does the operator have adequate procedures that address leak detection/surveying, classification/grading, and response?

R25) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q25) Headquarters				
Q25) Field				
R25) Headquarters				
R25) Field				

25) Comments:			

Training

Operator errors result in pipeline incidents every year. We are trying to determine what processes operators have in place to address the training requirements and safety needs of the pipeline industry.

192.605(b) Maintenance and normal operations. The operator's procedures must address the requirements for providing safety during maintenance and operations.

192.605(b)(8) Periodically reviewing the work done by operator personnel to determine the effectiveness, and adequacy of the procedures used in normal operation nad maintenance and modifying the procedures when deficiencies are found.

192.605(c) Abnormal operations. The operator's procedures must address the requirement for providing safety when operating design limits have been exceeded.

192.605(c)(4) Periodically reviewing the response of operator personnel to determine the effectiveness of the procedures controlling abnormal operation and taking corrective action where deficiencies are found.

192.605(d) Safety Related Condition Reports. The operator's procedures must include instructions enabling personnel who perform operation and maintenance activities to recognize conditions that potentially may be safety-related conditions that are subject to the reporting requirements of 191.23

192.615(b) Each operator shall (1) Furnish its supervisors who are responsible for emergency action a copy of that portion of the latest edition of the emergency procedures established under paragraph (a) of this section as necessary for compliance with those procedures; (2) Train the appropriate operating personnel to assure that they are knowledgeable of the emergency procedures and verify that the training is effective; and (3) Review employee activities to determine whether the procedures were effectively followed in each emergency.

G-26) Has the operator established and conducted a continuing training program to instruct operating and maintenance personnel?

R26) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q26) Headquarters				
Q26) Field				
R26) Headquarters				
R26) Field				

26) Comments:		

192.805(a) Operators must have a written qualification program by April 27, 2001.

G-Q27) Has the operator developed a written qualification program?

R27) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q27) Headquarters				
Q27) Field				
R27) Headquarters				
R27) Field				

27) Comments:		

Corrosion Control

Corrosion is a major cause of accidents and disbonded coating is often the leading factor. A check of close interval surveys for depressed areas may reveal disbonded coating. Pipe segments adjacent to locations where corrosion is found could easily develop corrosion because it may be subject to the same conditions. Additional preventive measures should be taken in these areas such as bell hole examinations and smart pigging activities. Review locations where clock-spring repairs were made to identify pipe segments that are subject to active corrosion. If the facility is within or downstream of a storage field, inquire about internal corrosion monitoring practices.

192.605(b) Maintenance and normal operations. The operator's procedures must address the requirements for providing safety during maintenance and operations.

192.605(b)(2) Controlling corrosion in accordance with the operations and maintenance requirements of Subpart I of this part.

G-Q28) Does the company maintain a comprehensive corrosion control program?

R28) Associated Records (annual survey, rectifiers)?

	Satisfactory	Needs Improvement	N/A	N/C
Q28) Headquarters				
Q28) Field				
R28) Headquarters				
R28) Field				

28) Comments:	

192.605(b)(2) cont'd

G-Q29) Is the company's corrosion program under the direction of a qualified person? (List the qualifications in the comment field.)

R29) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q29) Headquarters				
Q29) Field				
R29) Headquarters				

R29) Field					
29) Comments:					
192.605(b)(2) cont'd					
G-Q30) Are corrosion o	control procedures in	n place and do they follo	w Part 192/NACE/iı	ndustry standards?	
R30) Associated Record	ds?				
	Satisfactory	Needs Improvement	N/A	N/C	
Q30) Headquarters					
Q30) Field					
R30) Headquarters					
R30) Field					
30) Comments:					
30) Comments.					
192.613 Continuing Surveillance					
G-Q31) How is the gath	nered information re	eviewed and analyzed to	identify problem ar	eas?	
R31) Associated Record		T			
	Satisfactory	Needs Improvement	N/A	N/C	
Q31) Headquarters					
Q31) Field					

Т				
R31) Headquarters				
R31) Field				
31) Comments:				
or) comments.				
192.465(d) Monitoring correct any deficiencies		ontrol. Each operator s onitoring.	hall take prompt rer	nedial action to
G-O32) Under what cor	nditions does the one	erator take prompt rem	edial action?	
	_	crutor tane prompt rem	cular action.	
R32) Associated Record	IS?			
	Satisfactory	Needs Improvement	N/A	N/C
Q32) Headquarters				
Q32) Field				
R32) Headquarters				
R32) Field				
20 G				
32) Comments:				
Best Practice:	considered in deter	mining the need for and	timing of nigging as	nd close interval
surveys?	considered in deteri	mining the need for allu	timing or pigging ar	ia ciuse inici vai

33) Comments:				
33) Comments.				
192.605(b) cont'd				
pipeline has been invest	tigated and steps h om a pipeline for ar	sported by pipeline, unless to ave been taken to minimize to my reason, the internal surface	internal corrosion	; and (b) Whenever
	tent required by th	d to determine the extent of e applicable paragraphs of § nternal corrosion.		
	_	of hydrogen sulfide per 100 s n) may not be stored in pipe-		_
G-Q34) Does the opera	tor maintain a com	prehensive internal corrosio	on control prograi	m?
R34) Associated Record	ls?			
	Satisfactory	Needs Improvement	N/A	N/C
Q34) Headquarters				
Q34) Field				
R34) Headquarters				
R34) Field				
34) Comments:				
54) Comments:				

Valves

It is important that isolation valves be in good working order and accessible when needed.

192.179(a) Each transmission line, other than offshore segments, must have sectionalizing block valves spaced as follows, unless in a particular case the Administrator finds that alternative spacing would provide an equivalent level of safety: (1) Each point on the pipeline in a Class 4 location must be within 2 1/2 miles (4 kilometers) of a valve; (2) Each point on the pipeline in a Class 3 location must be within 4 miles (6.4 kilometers) of a valve; (3) Each point on the pipeline in a Class 2 location must be within 7 1/2 miles (12 kilometers) of a valve; and (4) Each point on the pipeline in a Class 1 location must be within 10 miles (16 kilometers) of a valve.

192.179(b) Each sectionalizing block valve on a transmission line, other than offshore segments, must comply with the following: (1) The valve and the operating device to open or close the valve must be readily accessible and protected from tampering and damage; and (2) The valve must be supported to prevent settling of the valve or movement of the pipe to which it is attached.

Q35) Does each sectionalizing block valve on a transmission line, other than offshore segments, comply with the following:

- Spaced as required by code? Review as-built drawings.
- The valve and the operating device to open or close the valve must be readily accessible and protected from tampering and damage.
- The valve must be supported to prevent settling of the valve or movement of the pipe to which it is attached.

R35) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q35) Headquarters				
Q35) Field				
R35) Headquarters				
R35) Field				

35) Comments:		

Best Practice:

Q36) Are there any locations where special features, such as valve stem extension in flood plains, had to be incorporated because of difficulty in complying with the above? Are there any automatic or remotely controlled valves? What is the operator policy for providing back up (bottles) in case pressure is lost to operate the sectionalizing block valves?

36) Comments:				
		ne, other than offshore s y to allow the transmiss	-	
oracticable. Each blow	down discharge mus	t be located so the gas c	an be blown to the a	tmosphere without
rom the electrical cond		ent to an overhead elect	tric line, so that the g	gas is directed away
037) Does each section	of a transmission lin	e, other than offshore so	egments, between ma	ain line valves have a
olow down valve with e		ow the transmission line	_	
practicable?				
R37) Associated Record				
	Satisfactory	Needs Improvement	N/A	N/C
Q37) Headquarters				
Q37) Field				
R37) Headquarters				
R37) Field				
37) Comments:				
192.179(d) Offshore seg off the flow of gas to an		on lines must be equippe an emergency.	ed with valves or othe	er components to shu
	-			1
		lines equipped with va ergency? Review as-bu		ients to shut off the
R38) Associated Record	de?			
A30) Associated Record	Satisfactory	Needs Improvement	N/A	N/C
Q38) Headquarters	Sunsing	1,0000 2000010	1,112	1,,0
Q38) Field		1		
R38) Headquarters				

R38) Field

1				
38) Comments:				
		might be required during an ng 15-months, but at least or		
		night be required during an		
		nths, but at least once each c		cted and partially
R39) Associated Record	ls?			-
	Satisfactory	Needs Improvement	N/A	N/C
Q39) Headquarters				
Q39) Field				
Q39) Field				
R39) Headquarters				
R39) Headquarters R39) Field				
R39) Headquarters				
R39) Headquarters R39) Field				
R39) Headquarters R39) Field				
R39) Headquarters R39) Field				
R39) Headquarters R39) Field				
R39) Headquarters R39) Field				

Patrol Program

An effective patrol program will combine information throughout the company to prevent damage to the pipeline and detect damage that has already occurred. Companies are encouraged to correlate information from a variety of sources such as comparing patrolling records with internal inspection data. Communication and areas of responsibility between patrol pilots and the personnel who follow-up and track the reports should be clearly defined so that both parties understand their role in preventing outside force damage.

192.705(a) Each operator shall have a patrol program to observe surface conditions on and adjacent to the transmission line right-of-way for indications of leaks, construction activity, and other factors affecting safety and operation.

G-Q40) Does the operator have an adequate patrolling program?

R40) Associated Records

	Satisfactory	Needs Improvement	N/A	N/C
Q40) Headquarters				
Q40) Field				
R40) Headquarters				
R40) Field				

40) Comments:		

192.705(a) cont'd

Q41) Are patrols conducted at regular intervals appropriate for the class location?

R41) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q41) Headquarters				
Q41) Field				
R41) Headquarters				
R41) Field				

41) Comments:		

Line Markers & Damage Prevention (Locating and Marking Pipelines)

It is critical that personnel who locate buried pipe in the course of their work are qualified and competent. Personnel performing this work may be operator or contract service company employees (line locate company, corrosion survey company, pipeline surveyors, etc.).

192.707 Line Markers - each operator shall place and maintain line markers over each buried pipeline.

G-Q42 Are markers located at public road crossing, railroad crossings, and in sufficient number along the remainder of each buried line?

R42) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q42) Headquarters				
Q42) Field				
R42) Headquarters				
R42) Field				

42) Comments:		

192.605(b)(8) Procedural manual for operations, maintenance, and emergencies - Maintenance and normal operations - the manual must include procedures for periodically reviewing the work done by operator personnel to determine the effectiveness of the procedures used in normal operation and maintenance and taking corrective action where deficiencies are found.

192.614(a) Damage prevention program - if the operator does not participate in a public service program, such as a one-call system, then the operator of a buried pipeline must carry out a written program to prevent damage to that pipeline from excavation activities.

G-Q43) Does the operator participate in a public service program? If not, does the operator evaluate their damage prevention procedures and take corrective action where deficiencies are found?

R43) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q43) Headquarters				
Q43) Field				
R43) Headquarters				
R43) Field				

43) Comments:				
192.614(c)(1) Damage r	revention program	ı - the operator must ident	tify, on a current l	hasis, persons who
normally engage in exc	avation activities in	the area in which the pip	eline is located; n	otify the public and
		n activities of the damage nned excavation activities		
persons who give notice	of their intent to e	xcavate of the type of tem	porary marking t	o be provided and how
could be damaged by ex		ection of excavation activi	iues, ii the operau	or beneves the pipenne
192.614(c)(3) Damage r	orevention program	ı - if the operator participa	ates in a public se	rvice program, such as
a qualified one-call syst	tem, then the operat	tor must: provide a means		
of planned excavation a	cuviues.			
G-Q44) Does the opera	itor have an adequa	ate damage prevention pro	ogram?	
R44) Associated Record	ls?	1		<u> </u>
	Satisfactory	Needs Improvement	N/A	N/C
Q44) Headquarters				
Q44) Field				
R44) Headquarters				
R44) Field				
44) Comments:				

Best Practice: NPRM Qualification of Pipeline Personnel

G-Q45) Are trained/qualified personnel used for pipeline locating & marking?

45) Comments:		

Liaison with Construction Project and Land-Use Officials(Public Education)

Encroachment around pipelines poses serious safety risks as third parties excavate in proximity to buried pipelines. A strong damage prevention program will provide advance notification of construction plans near the pipeline and will establish communication with the people involved in the project.

192.616 Public Education - each operator shall establish a continuing educational program to enable the public, appropriate government organizations, and persons engaged in excavation related activities to recognize a gas pipeline emergency and to report it to the operator or the fire, police, or other public officials.

G-Q46) How does the operator implement its continuing education program?

R46) Associated Records?

	Satisfactory	Needs Improvement	N/A	N/C
Q46) Headquarters				
Q46) Field				
R46) Headquarters				
R46) Field				

46) Comments:	
D. (D. (i	
	tor's damage prevention program include pro-active liaison with public construction ficials, engineers, and contractors?
47) Comments:	

48) Comments:	
	_
Best Practice: G-Q49) Does the operator have a liaison program that includes local developers and construction project officials?	
49) Comments:	

THE COMMON GROUND STUDY OF ONE CALL SYSTEMS AND DAMAGE PREVENTION BEST PRACTICES

G-Q50) Best Practice: Has the operator reviewed the "Common Ground" Study of One Call Systems and Damage Prevention Best Practices?		
50) Comments:		
G-Q51) Best Practice: Has the operator compared and measured the best practices against existing damage prevention practices		
contained in the operator's damage prevention plan?		
51) Comments:		
G-Q52) Best Practice: Has the operator implemented any of the best practices in addition to their existing damage prevention activities subsequent to review of the Common Ground Study?		
52) Comments:		

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G-Q53 Best Practice:
Has the operator improved communication with other stakeholders in damage prevention as a result of the
best practices?
•
53) Comments:
G-Q54 Is the operator's overall damage prevention program more effective as a result of implementation of
any best practices?
any best practices.
54) Comments:
54) Comments.